



Interoffice Memo
Office of Design Policy & Support

DATE: 9/7/2018

FILE: P.I.# 0014167
Fannin County

GDOT District 6 - Cartersville

CR 38/Shallowford Bridge Road at Toccoa River
Bridge Replacement

FROM:  for Brent Story, State Design Policy Engineer

TO: SEE DISTRIBUTION

SUBJECT: APPROVED CONCEPT REPORT

Attached is the approved Concept Report for the above subject project.

Attachment

Distribution:

Hiral Patel, Director of Engineering
Joe Carpenter, Director of P3
Albert Shelby, Director of Program Delivery
Darryl VanMeter, Assistant Director of P3/State Innovative Delivery Administrator
Kim Nesbitt, Program Delivery Administrator
Bobby Hilliard, Program Control Administrator
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Bill DuVall, State Bridge Engineer
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Erik Rohde, State Project Review Engineer
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Patrick Allen, State Utilities Engineer
Eric Conklin, State Transportation Data Administrator
Attn: Systems & Classification Branch
Benny Walden, Statewide Location Bureau Chief
Grant Waldrop, District Engineer
David Acree, District Preconstruction Engineer
Jun Birnkammer, District Utilities Manager
Jeff Henry, Project Manager
BOARD MEMBER - 9th Congressional District

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
LIMITED SCOPE PROJECT CONCEPT REPORT**

Project Type: <u>Bridge Replacement</u>	P.I. Number: <u>0014167</u>	
GDOT District: <u>District 6</u>	County: <u>Fannin</u>	
Federal Route Number: <u>N/A</u>	State Route Number: <u>N/A</u>	
Project Number: _____	<u>N/A</u>	

The proposed project will replace the bridge carrying CR 38/Shallowford Bridge Road over Toccoa River in Fannin County.

Submitted for approval:

<u>Samuel I. Powell</u> Long Engineering, Inc. Consultant Designer & Firm <i>Kimberly W. Nesbitt</i>	<u>08/24/18</u> Date <u>5/10/18</u>
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State Program Delivery Administrator <u>[Signature]</u> <i>C.L.B.</i> GDOT Project Manager	Date <u>05/09/18</u> Date
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Recommendation for approval:

**Recommendations on File*

*Eric Daff/AT State Environmental Administrator	Date <u>05/20/2018</u>
for *Christina D. Barry/AT State Traffic Engineer	Date <u>05/29/2018</u>
*Grant Waldrop/AT District Engineer	Date <u>05/30/2018</u>
*Bill DuVall/AT State Bridge Engineer	Date <u>07/21/2018</u>

- ☐ MPO Area: This project is consistent with the MPO adopted Regional Transportation Plan (RTP)/Long Range Transportation Plan (LRTP).
- ☒ Rural Area: This project is consistent with the goals outlined in the Statewide Transportation Plan (SWTP) and/or is included in the State Transportation Improvement Program (STIP).

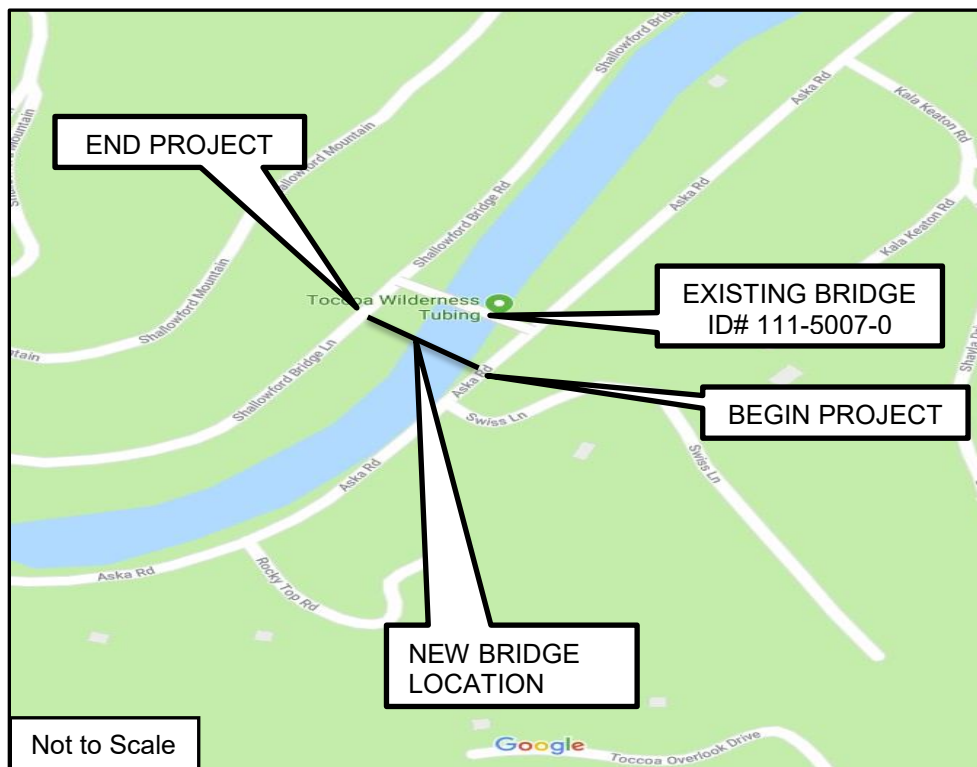
*Cynthia L. VanDyke/AT State Transportation Planning Administrator	Date <u>05/22/2018</u>
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Approval:

Concur: <u>Hialbual</u> GDOT Director of Engineering	Date <u>9-4-18</u>
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Approve: <u>Margaret B. Pivle</u> GDOT Chief Engineer	Date <u>9/7/18</u>
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PROJECT LOCATION MAP



BRIDGE REPLACEMENT ON CR 38 OVER TOCCOA RIVER FANNIN COUNTY, GA PI # 0014167

PLANNING & BACKGROUND DATA

Project Justification Statement (Preparer - GDOT Planning Office): The bridge on CR 38 (Shallowford Bridge Road) over Toccoa River, Structure ID 111-5007-0, was built in 1918. This bridge consists of one main span steel truss with two (2) approach spans of steel girders. These spans rest on vertical concrete walls with spread footings. The bridge was designed using an unknown design load. This bridge is classified as Fracture Critical and is currently posted for weight restrictions. The overall condition of this bridge would be classified as poor. The deck is in good condition. The superstructure is in poor condition with major corrosion and areas of up to 100% section loss. The substructure is in fair condition with moderate cracking in the vertical walls and moderate abrasion at the waterline. This bridge is classified as having an unknown foundation and therefore could be at risk of scour. Due to the weight restrictions of the structure, the fracture critical classification, and the unknown foundation of the substructure, replacement of this 100-year-old bridge is recommended.

Existing Conditions: Bridge 111-5007-0 is located on CR 38 (Shallowford Bridge Road) where it crosses Toccoa River and ties into Aska Road in Fannin County, 9.4 miles south of Blue Ridge, GA. The Benton MacKaye Trail crosses and is part of the existing bridge. The trail varies in width. The bridge is a single lane bridge that is 11.4 feet wide and has a vertical clearance of 10 feet 6 inches. CR 38 has varying road widths between 10 feet and 20 feet with surfaces varying between pavement and gravel along with minimal shoulders. Multiple utility poles are adjacent to the bridge. The area adjacent to the project site is utilized by Toccoa Wilderness Tubing and becomes congested during the summer months.

Other projects in the area: N/A

MPO: N/A - not in an MPO

TIP #: N/A

Congressional District(s): 9

Federal Oversight: ☐ PoDI ☒ Exempt ☐ State Funded ☐ Other

Projected Traffic: AADT 24 HR T: 4.0%

Current Year (2018): 150 Open Year (2022): 150 Design Year (2042): 150

Traffic Projections Performed by: Michael Baker International

Date approved by the GDOT Office of Planning: August 17, 2018

Functional Classification (Mainline): Rural Minor Collector

Complete Streets - Bicycle, Pedestrian, and/or Transit Standards Warrants:

Warrants met: ☐ None ☐ Bicycle ☒ Pedestrian ☐ Transit

Pavement Evaluation and Recommendations

Initial Pavement Evaluation Summary Report Required? ☒ No ☐ Yes

Initial Pavement Type Selection Report Required? ☒ No ☐ Yes

Feasible Pavement Alternatives: ☒ HMA ☐ PCC ☐ HMA & PCC

DESIGN AND STRUCTURAL

Description of Proposed Project:

The proposed project would replace the existing truss bridge on CR 38 (Shallowford Bridge Road) over Toccoa River. The project begins at the intersection of CR 38 and Shallowford Bridge Lane and continues east approximately 252 feet to the intersection with Aska Road. Total project length is approximately 252 feet. The project is located approximately 9.4 miles south of Blue Ridge, GA in Fannin County. This project would replace the existing substandard bridge with a new truss bridge offset approximately 150 feet south (downstream) of the existing bridge. The proposed bridge typical section consist of two 9-foot lanes with a 2-foot shoulder on the left side and a 11-foot 6-inch shoulder (10-foot sidewalk on the right side). The Benton MacKaye Trail crosses the existing bridge and will be relocated to the new bridge. Fannin County requested to retain the existing truss bridge in its current location. Per discussion at the stakeholder meeting held on 03/14/2018, GDOT Bridge office will accept leaving the existing truss bridge in place under the condition that

County: Fannin

a Memorandum of Understanding is executed between the department and Fannin County, designating the County as responsible for all inspection cost, maintenance cost and risk associated with leaving the bridge in place. It must be closed to all vehicular traffic as this bridge is scoped to replace a deficient bridge. It also, may not be feasible or practical to raise the carrying capacity to meet AASHTO pedestrian loading.

Major Structures:

Structure ID	Existing	Proposed
111-5007-0	Built in 1918; 175 feet long three span truss bridge (2-20 foot spans and one 135 foot center span) with one 11.4 foot lane and a vertical clearance of 10 foot 6 inches. Sufficiency rating 7.6.	Proposed 195 foot long single span truss bridge consisting of two (2) - 9 ft lanes; a 2 foot shoulder on the left side; a 11 foot 6 inch shoulder (10 foot sidewalk) on the right side; total bridge width 31.5 feet.

Accelerated Bridge Construction (ABC) techniques anticipated: ☒ No ☐ Yes

The existing bridge will be replaced with a new bridge on a parallel alignment approximately 150 feet south of the existing bridge. The proposed structure will be designed to meet current design loading and shoulder width requirements.

To reduce traffic impacts and on site construction time, potential ABC techniques being considered include:

- Use of prefabricated concrete columns and/or bent caps.
- Use of prefabricated truss structure.
- Structure constructed off-site.

The proposed truss bridge has a smaller structure depth than a prestressed concrete girder, which creates a better hydraulic opening at a lower elevation, while maintaining a road grade that can be constructed with minimal impacts to the existing road. This alternate will not require a closure and traffic will be maintained throughout the construction of the project.

Mainline Design Features: CR 38 (Shallowford Bridge Road) over Toccoa River

Feature	Existing	Policy*	Proposed*
Typical Section - Roadway			
- Number of Lanes	N/A		2
- Lane Width(s)	N/A	9 feet	9 feet
- Median Width & Type	N/A	N/A	N/A
- Right Shoulder Width	N/A	2 feet	12.5 feet
- Left/Right Shoulder Slope	N/A	6	Left 6%; Right 2%
- Left Shoulder Width	N/A	2 feet	2 feet
- Sidewalks	N/A	N/A	Left N/A; Right 10 ft
- Auxiliary Lanes	N/A		N/A
- Bike Accommodations	N/A	N/A	N/A
Posted Speed	N/A		25
Design Speed	N/A	25	25
Minimum Horizontal Curve Radius	N/A	N/A	TANGENT
Maximum Superelevation Rate	N/A	N/A	N/A
Maximum Grade	N/A	7%	2.74%
Access Control	N/A		PERMIT
Design Vehicle	N/A		WB-67
Pavement Type	N/A		Asphalt

*According to current GDOT design policy/AASHTO if applicable.

County: Fannin

Is the project located on a NHS roadway? ☒ No ☐ Yes**Design Exceptions/Design Variances to GDOT and/or FHWA Controlling Criteria anticipated:**

Yes, for hydraulic clearance. The detailed hydraulic modeling required for this determination is not included in the Concept Phase scope. In the Preliminary Design Phase this will be detailed, yielding the specific overtopping storm. Based on current FEMA data the 10-year storm and higher overtops the existing bridge. And based on our expertise and experience the bankfull flow for many rural channels, in GA and elsewhere, is approximately the 2-year storm. If the channel is slightly, or somewhat incised it could approximately be the 5-year event. The existing bridge may not clear these storms either. With the approach roadway constraints, the proposed bridge will be placed at or near the existing profile. And with the required design loads and desire to keep substructure out of the channel, the distance from the deck to the low cord will be greater. All this points to a replacement bridge not being able to clear the design storm at all, and likely being overtopped by it. Therefore, an exception/variance is anticipated.

Design Variances to GDOT Standard Criteria anticipated: See aboveLighting required: ☒ No ☐ YesOff-site Detours Anticipated: ☒ No ☐ Undetermined ☐ YesTransportation Management Plan [TMP] Required: ☐ No ☒ Yes

If Yes: Project classified as: ☒ Non-Significant
 TMP Components Anticipated: ☒ TTC

INTERCHANGES AND INTERSECTIONS

Major Interchanges/Intersections: None

Intersection Control Evaluation (ICE) Required: ☒ No ☐ YesRoundabout Peer Review Required: ☒ No ☐ Yes ☐ Completed – Date:**UTILITY AND PROPERTY**

Railroad Involvement: N/A

Utility Involvements:

Blue Ridge Mountain EMC
 TDS Telecom

SUE Required: ☒ No ☐ YesPublic Interest Determination Policy and Procedure recommended? ☒ No ☐ YesRight-of-Way: Existing width: 0 feet Proposed width: Varies 90-100 feet

Required Right-of-Way anticipated: ☐ None ☒ Yes ☐ Undetermined
 Easements anticipated: ☐ None ☐ Temporary ☒ Permanent ☒ Utility ☐ Other

Anticipated total number of impacted parcels: 3
 Displacements anticipated: Businesses: 0
 Residences: 0
 Other: 0
 Total Displacements: 0

Impacts to USACE property anticipated? ☒ No ☐ Yes ☐ Undetermined

CONTEXT SENSITIVE SOLUTIONS

Issues of Concern: None

Context Sensitive Solutions Proposed: None

ENVIRONMENTAL AND PERMITS

Anticipated Environmental Document:

NEPA: ☐ PCE ☒ CE ☐ EA-FONSI
GEPA: ☐ Type A ☐ Type B ☐ None

Level of Environmental Analysis:

- ☒ The environmental considerations noted below are based on preliminary desktop or screening level environmental analysis and are subject to revision after the completion of resource identification, delineation, and agency concurrence.
- ☐ The environmental considerations noted below are based on the completion of resource identification, delineation, and agency concurrence.

Water Quality Requirements:

MS4 Compliance – Is the project located in an MS4 area? ☒ No ☐ Yes

Is Non-MS4 water quality mitigation anticipated? ☐ No ☒ Yes

Environmental Permits, Variances, Commitments, and Coordination Anticipated:

- A Clean Water Act Section 404 permit will be required.
- A State buffer variance is not anticipated to be required.
- Agency coordination is anticipated to be required under Section 7 of the Endangered Species Act.
- Agency coordination is anticipated to be required under Section 106 of the National Historic Preservation Act and under Section 4(f) of the Department of Transportation Act.

NEPA Comments & Information:

- **Ecology** – The state-protected trailing meadowrue was identified in the project area during the spring field survey; a fall survey is required for additional protected plant species. The state-protected Eastern hellbender and the state protected blotched chub, tangerine darter, olive darter, and wounded darter are assumed present per GDNr-WRD. A bat habitat suitability survey is required for the federally protected northern long-eared bat and Indiana bat. BMPs will be included in SP 107.23H for the protection of federally and state-listed species identified in the project area. One perennial stream and one intermittent tributary were identified in the project area; a 404 permit will be required for impacts to perennial stream; a state buffer variance is not anticipated to be required.
- **History** – Section 106 Early Coordination was submitted to SHPO and other consulting parties on April 12, 2018. Fieldwork was conducted and the Final Historic Resources Survey Report submitted to GDOT on June 27, 2018. The existing bridge (GDOT Bridge #111-5007-0) was determined to be eligible for inclusion on the National Register of Historic Places by the Georgia Historic Bridge Survey in 1981, and these findings remain valid. No other eligible resources were identified during field survey.
- **Archaeology** – Section 106 Early Coordination Notification was submitted and a site file search was completed, which revealed no previously surveyed archaeological resources. Fieldwork is underway, and a Short Form No Find Report is anticipated.
- **Air Quality** – An Air Assessment is anticipated to be required. Fannin County is not classified as either a non-attainment area or a maintenance area.
- **Noise** – A Type III Noise Screening Assessment is anticipated to be required. There are noise-sensitive receptors (residences) in the vicinity of the project area.
- **Public Involvement** – A PIOH is anticipated to be conducted.

County: Fannin

COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTSIs Federal Aviation Administration (FAA) coordination anticipated? ☒ No ☐ Yes

Project Meetings: Project Kick-off Meeting 01-10-2018, Monthly Status Call Team Meeting 02-28-2018,
Concept Team Meeting 04-19-2018

Project Activity	Party Responsible for Performing Task(s)
Concept Development	Long Engineering
Design	Long Engineering
Right-of-Way Acquisition	GDOT
Utility Coordination (Preconstruction)	GDOT
Utility Relocation (Construction)	Utility Owners
Letting to Contract	GDOT
Construction Supervision	GDOT
Providing Material Pits	Contractor
Providing Detours	Contractor
Environmental Studies, Documents, & Permits	Long Engineering
Environmental Mitigation	GDOT
Construction Inspection & Materials Testing	Long Engineering/GDOT

Other coordination to date:

Project Cost Estimate and Funding Responsibilities:

	PE Activities		ROW**	Reimbursable Utilities	CST*	Total Cost
	PE Funding	Section 404 Mitigation				
Funded By	GDOT	GDOT	GDOT	GDOT	GDOT	
\$ Amount	\$500,000	\$12,000	\$330,564	\$31,304	\$2,192,783.68	\$3,066,651.68
Date of Estimate	12/29/17	03/26/18	05/14/18	04/19/18	07/09/18	

*CST Cost includes: Construction, Engineering and Inspection, Contingencies and Liquid AC Cost Adjustment.

ALTERNATIVES DISCUSSION

Preferred Alternative (Alternative 1): Retain existing bridge and construct a new bridge approximately 150 feet south of the existing bridge.			
Estimated Property Impacts:	3	Estimated Total Cost:	\$3,066,651.68
Estimated ROW Cost:	\$330,564.00	Estimated CST Time:	15 Months
<p>Rationale: This is the preferred alternate because 1) it accommodates Fannin County's request to leave the existing historic truss bridge in place, 2) it eliminates the need for an offsite detour, to which the County has expressed opposition, 3) it meets the need and purpose of the project, and 4) it saves demolition costs of the existing truss bridge. Anticipated property impacts are the following: additional ROW will be required, with no anticipated displacements; the existing parking will be affected along Aska Road. Fannin County has expressed opposition to removing the existing bridge and implementing an off-site detour. The County's opposition is primarily due to the length (distance and time) and pavement/surface conditions of roads of the proposed detour route.</p>			

County: Fannin

Alternative 2: Retain existing bridge and construct a new bridge approximately 275 feet north of the existing bridge.			
Estimated Property Impacts:	4	Estimated Total Cost:	\$3,395,529.03
Estimated ROW Cost:	\$396,676.00	Estimated CST Time:	15 Months
<p>Rationale: This alternate has similar attributes to the preferred alternate. However, it was not selected as the preferred alternate primarily because of the anticipated increased construction cost and the potential complexity of the right-of-way (row) acquisition. Construction cost of this alternate is higher than the preferred alternate primarily because the Shallowford Road intersection will require increased construction complexity to avoid encroachment into the Toccoa River. The existing topography creates a challenge tying Shallowford Road to the proposed bridge approach.</p> <p>Right-of-way acquisition of this alternate will likely require property owned by Tennessee Valley Authority (TVA), a federal entity. This could increase cost and lengthen the overall project schedule. Anticipated property impacts are as follows, 1) right-of-way will be required from four parcels, including property from TVA, 2) no total displacements are shown but significant damages are likely to property on Shallowford Road aligned with the new bridge location due to westbound traffic. River front access to this property will likely be eliminated. Maintaining access to the property during construction will also be a challenge. Fannin County has expressed opposition to removing the existing bridge and implementing an off-site detour. The County's opposition is primarily due to the length (distance and time) and pavement/surface conditions of the roads of the proposed detour route.</p>			

Alternative 3: Demolish and replace the bridge at its current location with an off-site detour.			
Estimated Property Impacts:	1	Estimated Total Cost:	\$3,534,947.24
Estimated ROW Cost:	\$196,000.00	Estimated CST Time:	18 Months
<p>Rationale: This alternate was not selected as preferred because 1) it does not accommodate Fannin County's request to leave the existing historic truss bridge in place, 2) the County has expressed opposition to an off-site detour, 3) The construction costs will be higher than the preferred alternate, 4) total project cost is higher due to the added demolition costs. Anticipated property impacts are the following: additional ROW will be required, with no anticipated displacements, this is comparable to the preferred alternate; the existing parking will be affected along Aska Road; an approximately 10-mile off-site detour will be required along varying pavement surfaces/conditions of roads on the only available detour route.</p>			

No-Build Alternative: Retain existing CR 38 Bridge over Toccoa River and do not build a replacement bridge.			
Estimated Property Impacts:	0	Estimated Total Cost:	\$0
Estimated ROW Cost:	\$0	Estimated CST Time:	N/A
<p>Rationale: Due to the age of the bridge, the overall sufficiency rating, and structural integrity of the substructure, replacement is recommended. This alternate was not selected as preferred because it does not meet the project justification statement.</p>			

Additional Comments/ Information:

Stan Helton, Board of Commissioner, Chairman, Fannin County, indicated that they could adopt Shallowford Bridge Road portion of the proposed project that is currently held as private, thus making it a county road with prescriptive right-of-way.

LIST OF ATTACHMENTS / SUPPORTING DATA

1. Concept Layout
2. Typical Sections
3. Cost Estimate
4. Approved Traffic Memo dated August 17, 2018
5. Detour Route Map (Alternative #3)
6. Meeting Minutes - Draft Concept Team Meeting
7. Bridge Inventory



LEGEND

EXISTING INFORMATION

--- RIGHT-OF-WAY

- - - PROPERTY LINE

PROPOSED INFORMATION

— CENTERLINE

— RIGHT-OF-WAY

▨ CONSTRUCTION AND MAINTENANCE EASEMENT

■ NEW PAVEMENT

■ NEW DRIVEWAY

■ NEW SIDEWALK

■ GRASSING/SOD

▭ NEW/ WIDENED BRIDGE

↩ ↑ ↪ TRAFFIC FLOW ARROWS

SCALE IN FEET



LONG
ENGINEERING, INC.

CONCEPTUAL LAYOUT
PREFERRED ALTERNATE #1
NEW PERMANENT BRIDGE AND ALIGNMENT
PI #0014167
CR 38 / SHALLOWFORD BRIDGE RD
OVER TOCCOA RIVER



LEGEND

EXISTING INFORMATION	PROPOSED INFORMATION
RIGHT-OF-WAY	CENTERLINE
PROPERTY LINE	RIGHT-OF-WAY
	CONSTRUCTION AND MAINTENANCE EASEMENT
	NEW PAVEMENT
	NEW DRIVEWAY
	NEW SIDEWALK
	GRASSING/SOD
	NEW/ WIDENED BRIDGE
	TRAFFIC FLOW ARROWS
SCALE IN FEET	

LONG
ENGINEERING, INC.

CONCEPTUAL LAYOUT
ALTERNATE #2
NEW PERMANENT BRIDGE AND ALIGNMENT
PI #0014167
CR 38 / SHALLOWFORD BRIDGE RD
OVER TOCCOA RIVER

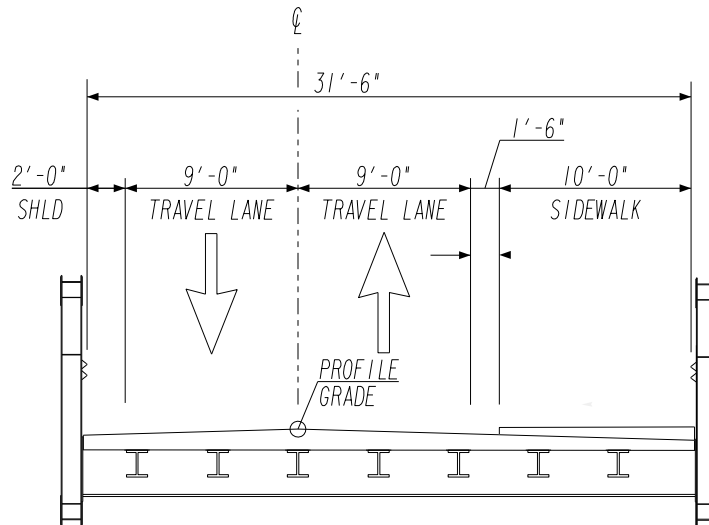


LEGEND

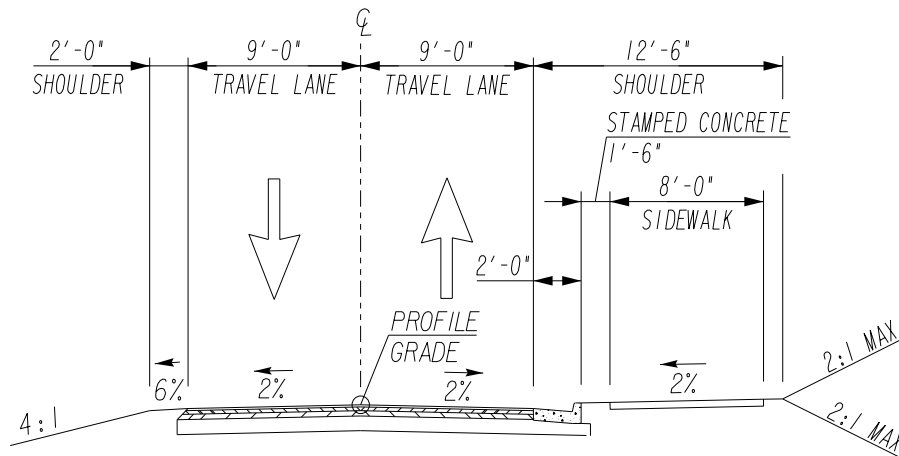
EXISTING INFORMATION	PROPOSED INFORMATION
<p>--- RIGHT-OF-WAY</p> <p>- - - - - PROPERTY LINE</p>	<p>— CENTERLINE</p> <p>— RIGHT-OF-WAY</p> <p>— CONSTRUCTION AND MAINTENANCE EASEMENT</p> <p>— NEW PAVEMENT</p> <p>— NEW DRIVEWAY</p> <p>— NEW SIDEWALK</p> <p>— GRASSING/SOD</p> <p>— NEW/ WIDENED BRIDGE</p>
<p>SCALE IN FEET</p> <p>0 50 100 200</p>	<p>↑ ↑ ↑ ↑ TRAFFIC FLOW ARROWS</p>

LONG
ENGINEERING, INC.

CONCEPTUAL LAYOUT
ALTERNATE #3
REMOVE/REPLACE EXISTING BRIDGE
PI #0014167
CR 38 / SHALLOWFORD BRIDGE RD
OVER TOCCOA RIVER



BRIDGE TYPICAL SECTION



ROADWAY TANGENT SECTION

LONG
ENGINEERING, INC.

CONCEPTUAL TYPICAL SECTIONS
PREFERRED ALTERNATE #1,
ALT #2 & ALT #3

PI *0014167
CR 38 / SHALLOWFORD BRIDGE ROAD
OVER TOCCOA RIVER

(SHEET 1 OF 1)

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE	P.I. No.	0014167	OFFICE	Program Delivery
PROJECT DESCRIPTION			DATE	August 24, 2018
CR 38/SHALLOWFORD BRIDGE ROAD @ TOCCOA RIVER S OF MORGONTON				

From: Kimberly Nesbitt, State Program Delivery Administrator

To: Lisa L. Myers, State Project Review Engineer
via Email Mailbox: CostEstimatesandUpdates@dot.ga.gov

Subject: REVISIONS TO PROGRAMMED COSTS

PROJECT MANAGER	Jeff Henry	MGMT LET DATE	9/15/2020
		MGMT ROW DATE	10/15/2019

PROGRAMMED COSTS (TPro W/OUT INFLATION)

LAST ESTIMATE UPDATE

CONSTRUCTION	\$	2,000,000.00	DATE	N/A
RIGHT OF WAY	\$	250,000.00	DATE	N/A
UTILITIES	\$	0.00	DATE	N/A

REVISED COST ESTIMATES

CONSTRUCTION*	\$	2,192,783.68
RIGHT OF WAY**	\$	330,564.00
UTILITIES**	\$	31,304.00

***Cost Contains 12 % Contingency

REASONS FOR COST INCREASE AND CONTINGENCY JUSTIFICATION:

- * The construction cost estimate in this Revision is per the CST estimate provided by the consultant (Long Engineering) with the Approved Concept Report.
- ** Utilities and ROW estimates cost were provided by the District Utilities Engineer and State ROW Office.
- *** 12% contingency was used based on Risk Based Cost Estimating recommended contingency range for concept level estimates.

CONTINGENCY SUMMARY

A. CONSTRUCTION COST ESTIMATE:	\$	1,862,121.84	Base Estimate From CES	
B. ENGINEERING AND INSPECTION (E & I):	\$	93,106.09	Base Estimate (A) x	5 %
C. CONTINGENCY:	\$	234,627.35	Base Estimate (A) + E & I (B) x	12 %
See % Table in "Risk Based Cost Estimation" Memo				
D. TOTAL LIQUID AC ADJUSTMENT:	\$	2,928.40	Total From Liquid AC Spreadsheet	
E. CONSTRUCTION TOTAL:	\$	2,192,783.68	(A + B + C + D = E)	

REIMBURSABLE UTILITY COSTS

UTILITY OWNER	REIMBURSABLE COST
Blue Ridge Mtn EMC	\$31,304
	\$ -
TOTAL	\$ 31,304.00

ATTACHMENTS: (File Copy in the Project Cost Estimate Folder)

CES estimate provided with draft concept report submittal
 PSR
 Liquid AC Adjustment Spreadsheet

Consultant Validation of Final QC/QA for Construction Cost Estimate Used in This Revision To Programmed Costs

COMPANY NAME: Long Engineering, Inc.

VALIDATION OF FINAL QC/QA

PRINTED NAME: Anthony Kamburis, PE

TITLE: Project Manager

SIGNATURE:



DATE: 08/24/2018

PROJ. NO.

N/A

CALL NO.

P.I. NO.

0014167

DATE

8/24/2018

INDEX (TYPE)

DATE

INDEX

REG. UNLEADED

Aug-18

\$ 2.729

DIESEL

\$ 3.078

LIQUID AC

\$ 541.00

Link to Fuel and AC Index:

<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

LIQUID AC ADJUSTMENTS

PA=[((APM-APL)/APL)]xTMTxAPL

Asphalt

Price Adjustment (PA)

2694.18

\$

2,694.18

Monthly Asphalt Cement Price month placed (APM)

Max. Cap

60%

\$ 865.60

Monthly Asphalt Cement Price month project let (APL)

\$ 541.00

Total Monthly Tonnage of asphalt cement (TMT)

8.3

ASPHALT	Tons	%AC	AC ton
Leveling	50	5.0%	2.5
12.5 OGFC		5.0%	0
12.5 mm		5.0%	0
9.5 mm SP	23	5.0%	1.15
25 mm SP	56	5.0%	2.8
19 mm SP	37	5.0%	1.85
	166		8.3

BITUMINOUS TACK COAT

Price Adjustment (PA)

\$ 234.22

\$

234.22

Monthly Asphalt Cement Price month placed (APM)

Max. Cap

60%

\$ 865.60

Monthly Asphalt Cement Price month project let (APL)

\$ 541.00

Total Monthly Tonnage of asphalt cement (TMT)

0.721576955

Bitum Tack

Gals	gals/ton	tons
168	232.8234	0.72157695

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)

0

\$

-

Monthly Asphalt Cement Price month placed (APM)

Max. Cap

60%

\$ 865.60

Monthly Asphalt Cement Price month project let (APL)

\$ 541.00

Total Monthly Tonnage of asphalt cement (TMT)

0

Bitum Tack	SY	Gals/SY	Gals	gals/ton	tons
Single Surf. Trmt.		0.20	0	232.8234	0
Double Surf.Trmt.		0.44	0	232.8234	0
Triple Surf. Trmt		0.71	0	232.8234	0
					0

TOTAL LIQUID AC ADJUSTMENT

\$

2,928.40

STATE HIGHWAY AGENCY

JOB ESTIMATE REPORT

JOB NUMBER : PI 0014167 SPEC YEAR: 13
DESCRIPTION: CR38/SHALLOWFORD BRIDGE RD @ TOCCOA RIVER - PREFERRED

COST GROUPS FOR JOB PI 0014167

COST GROUP	DESCRIPTION	QUANTITY	PRICE	AMOUNT	ACTIVE?
ASPH	ASPHALT (TN)				Y
BASE	BASE/AGGREGATE (TN)				Y
EROC	EROSION CONTROL (SY)				Y
ACTIVE COST GROUP TOTAL				0.00	
INFLATED COST GROUP TOTAL				0.00	

ITEMS FOR JOB PI 0014167

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	150-1000		LS	TRAFFIC CONTROL - PI 0014167	1.000	20000.00	20000.00
0009	153-1300		EA	FIELD ENGINEERS OFFICE TP 3	1.000	96425.92	96425.93
0010	163-0232		AC	TEMPORARY GRASSING	2.000	538.70	1077.40
0015	163-0240		TN	MULCH	22.000	387.32	8521.23
0020	163-0300		EA	CONSTRUCTION EXIT	2.000	1612.33	3224.67
0030	163-0527		EA	CNST/REM RIP RAP CKDM,STN P RIPRAP/SN BG	12.000	404.85	4858.31
0100	163-0529		LF	CNST/REM TEMP SED BAR OR BLD STRW CK DM	400.000	5.74	2297.13
0130	165-0030		LF	MAINT OF TEMP SILT FENCE, TP C	650.000	2.06	1344.03
0134	165-0041		LF	MAINT OF CHECK DAMS - ALL TYPES	400.000	7.44	2977.31
0140	165-0101		EA	MAINT OF CONST EXIT	2.000	564.68	1129.37
0155	167-1000		EA	WATER QUALITY MONITORING AND SAMPLING	4.000	180.98	723.93
0160	167-1500		MO	WATER QUALITY INSPECTIONS	12.000	723.39	8680.75
0165	171-0030		LF	TEMPORARY SILT FENCE, TYPE C	650.000	3.59	2335.57
0170	210-0100		LS	GRADING COMPLETE - PI 0014167	1.000	115000.00	115000.00
0175	310-1101		TN	GR AGGR BASE CRS, INCL MATL	94.000	27.18	2554.92
0180	318-3000		TN	AGGR SURF CRS	200.000	24.29	4858.00
0185	402-1812		TN	RECYL AC LEVELING,INC BM&HL	50.000	77.82	3891.22
0190	402-3103		TN	REC AC 9.5 MM SP,TPII,GP2, INCL BM & H L	23.000	149.10	3429.43
0195	402-3121		TN	RECYL AC 25MM SP,GP1/2,BM&HL	56.000	97.93	5484.17
0200	402-3190		TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	37.000	130.73	4837.10
0205	413-0750		GL	TACK COAT	168.000	2.52	423.36
0209	432-5010		SY	MILL ASPH CONC PVMT,VARB DEPTH	123.000	13.16	1618.75
0214	433-1100		SY	REF CONC APPR SL/INCL CURB	210.000	195.23	41000.25
0215	441-0106		SY	CONC SIDEWALK, 6 IN	285.000	59.51	16960.93
0220	441-0301		EA	CONC SPILLWAY, TP 1	2.000	2170.79	4341.59
0224	441-6222		LF	CONC CURB & GUTTER/ 8X30TP2	125.000	38.31	4789.03
0225	543-9000		LS	CONSTR OF BRIDGE COMPLETE - 160' X 31.	1.000	1451520.00	1451520.00

STATE HIGHWAY AGENCY

DATE : 08/24/2018

PAGE : 2

JOB ESTIMATE REPORT

=====						
			5' SINGLE SPAN TRUSS			
0230	576-1018	LF	SLOPE DRAIN PIPE, 18 IN	60.000	44.62	2677.72
0235	603-2018	SY	STN DUMPED RIP RAP, TP 1, 18	250.000	55.00	13750.00
0240	603-7000	SY	PLASTIC FILTER FABRIC	250.000	4.53	1133.50
0245	634-1200	EA	RIGHT OF WAY MARKERS	10.000	178.44	1784.49
0250	636-1033	SF	HWY SIGNS, TP1MAT,REFL SH TP 9	20.000	21.36	427.31
0255	636-1036	SF	HWY SGN,TP1MAT,REFL SH TP 11	25.000	20.00	500.00
0260	636-2070	LF	GALV STEEL POSTS, TP 7	144.000	9.44	1359.50
0264	641-1200	LF	GUARDRAIL, TP W	240.000	25.35	6085.44
0265	641-5001	EA	GUARDRAIL ANCHORAGE, TP 1	2.000	1132.14	2264.29
0269	641-5020	EA	GUARDRL, ANCHOR, TP 12B,31 IN, FLR, E/A	2.000	2860.57	5721.14
0270	653-1501	LF	THERMO SOLID TRAF ST 5 IN, WHI	390.000	1.11	435.01
0275	653-1502	LF	THERMO SOLID TRAF ST, 5 IN YEL	390.000	1.04	408.07
0280	654-1001	EA	RAISED PVMT MARKERS TP 1	6.000	5.02	30.13
0285	657-1054	LF	PRF PL SD PVMT MKG,5,WH,TP PB	390.000	5.59	2183.11
0290	657-6054	LF	PRF PL SD PVMT MKG,5,YW,TP PB	390.000	3.59	1400.49
0295	700-6910	AC	PERMANENT GRASSING	2.000	789.73	1579.47
0300	700-7000	TN	AGRICULTURAL LIME	2.000	131.77	263.54
0305	700-8000	TN	FERTILIZER MIXED GRADE	2.000	697.20	1394.40
0310	700-8100	LB	FERTILIZER NITROGEN CONTENT	53.000	4.13	219.09
0315	716-2000	SY	EROSION CONTROL MATS, SLOPES	445.000	1.35	600.76
0320	900-0037	SF	CONCRETE PAVERS	240.000	15.00	3600.00

ITEM TOTAL						1862121.86
INFLATED ITEM TOTAL						1862121.86
TOTALS FOR JOB PI 0014167						

ESTIMATED COST:						1862121.84
CONTINGENCY PERCENT (0.0):						0.00
ESTIMATED TOTAL:						1862121.84

NOTE: The item totals include all alternate items. The estimated totals include only the low cost alternate items.

From: Coleman, Jeanine E
Sent: Wednesday, May 16, 2018 9:05 AM
To: Henry, Jeff
Cc: Savage, Bruce
Subject: RE: PI#0014167 Fannin ROW
Attachments: PI# 0014167 Preliminary ROW Cost Estimate.pdf

Jeff,

Attached is the preliminary cost estimate you requested.

Please let us know if you need anything else

Thank you,

Jeanine Coleman
DOT
District 6
Right of Way Specialist 11
500 Joe Frank Harris PKWY
Cartersville, GA 30120
Office: (678)721-5300
JColeman@dot.ga.gov



From: Henry, Jeff
Sent: Friday, May 11, 2018 1:46 PM
To: Coleman, Jeanine E <JColeman@dot.ga.gov>
Cc: Savage, Bruce <bsavage@dot.ga.gov>
Subject: RE: PI#0014167 Fannin ROW

Jeanine,

Attached is the latest concept layout submitted yesterday in the concept report submittal. The standard checklist is attached for your reference.

The approx. total REQ ROW is 16,000 sq. ft. and three parcels are impacted.

If you need anything else, let me know.

Thanks,

Jeff

Jeff Henry, PE
Consultant Project Manager



Georgia Department of Transportation
Office of Program Delivery/AECOM
600 West Peachtree St, 25th Floor
Atlanta, GA 30308
Mobile: (404) 663-8649
E-mail: jhenry@dot.ga.gov

From: Coleman, Jeanine E
Sent: Friday, May 11, 2018 10:35 AM
To: Henry, Jeff <JHenry@dot.ga.gov>
Cc: Savage, Bruce <bsavage@dot.ga.gov>
Subject: PI#0014167 Fannin

Mr. Henry,

I have been assigned to prepare a preliminary cost estimate for the Project mentioned above. Do you have anything that shows the required right of way area needed?

Thank you,

Jeanine Coleman
DOT
District 6
Right of Way Specialist 11
500 Joe Frank Harris PKWY
Cartersville, GA 30120
Office: (678)721-5300
JColeman@dot.ga.gov



There's road work ahead. And roadway work zones are hazardous for workers and the public. In fact, most victims in work zone crashes are drivers or passengers. Work zone safety is everybody's responsibility - pay attention – slow down – watch for workers - expect the unexpected. And whenever you drive, always **Drive Alert Arrive Alive** - buckle up; stay off the phone and no texting. Visit www.dot.ga.gov.

Preliminary Right of Way Cost Estimate

DATE: 5/14/18

PROJECT: 0014167

EXISTING/REQUIRED R/W: .36 acre/16,000 SQ Feet

PROJECT TERMINI: STA TBD

PROJECT DESCRIPTION: Bridge Replacement on CR 38/Shallowford Bridge Road@Toccoa River

P.I. NUMBER: 0014167

NO. PARCELS: 3

Land:

Residential: .12 ac @\$76,800	= \$9,200
Residential: .12 ac @\$76,800	= \$9,200
Commercial: .12 ac @ \$310,000	= \$37,200
	<hr/>
	\$55,600

Improvements:

<u> </u> x businesses, <u> </u> houses, <u> </u> mobile homes, curbing	
Gravel, Paving, signs, fencing and site improvements	\$20,000

Relocation:

<u> </u> Commercial @25,000/parcel = \$	\$0
<u> </u> Residential @ \$20,000/parcel = \$	\$0

Damages:

Proximity-Parcels	
Consequential-Parcels	
Cost to Cure-Parcels	\$6425

Net Cost	\$82,025
Scheduling Contingency 55%	\$45,115
Sub-Total	\$127,140
Adm/Court Cost 60%	\$76,284
	<hr/>
Total	\$330,564

TOTAL COST \$330,564

Prepared by:


Jeanine Coleman

Approved: _____

GDOT ROW

From: Westberry, Lisa
Sent: Monday, March 26, 2018 9:48 AM
To: Henry, Jeff
Cc: Allen, Jordan J
Subject: P.I. 0014167, Fannin County - Estimated Mitigation Cost for Concept Report

Jeff,

As requested, the estimated mitigation costs for the subject project is **\$12,000**. This was based on a review of aerial photography, NWI mapping, and NRCS soil surveys and not an actual field verification. The total cost of mitigation credits could remain the same or change once the ecology field survey is complete.

If you should have any questions or need any additional information, please do not hesitate to contact me.

Thank you,

Lisa Westberry | Special Projects Coordinator | **Office of Environmental Services** | 600 West Peachtree Street, NW | **Atlanta, GA 30308** | 404-631-1772

Department of Transportation State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE Fannin County
P.I. # 0014167

OFFICE Planning

DATE August 17, 2018

FROM Paul Tanner, State Transportation Planning Administrator

TO Kimberly W. Nesbitt, State Program Delivery Administrator
Attention: Jeff Henry

SUBJECT **Design Traffic Forecasts** for CR 38/SHALLOWFORD BRIDGE ROAD @
TOCCOA RIVER S OF MORGONTON

Per request, we have reviewed the consultant's design traffic forecasts for the above project. Based on the information furnished, we find the design traffic forecasts to be satisfactory, and the design traffic forecasting task to be complete for the above project. The reviewed and approved design traffic forecasts for the above project is as follows:

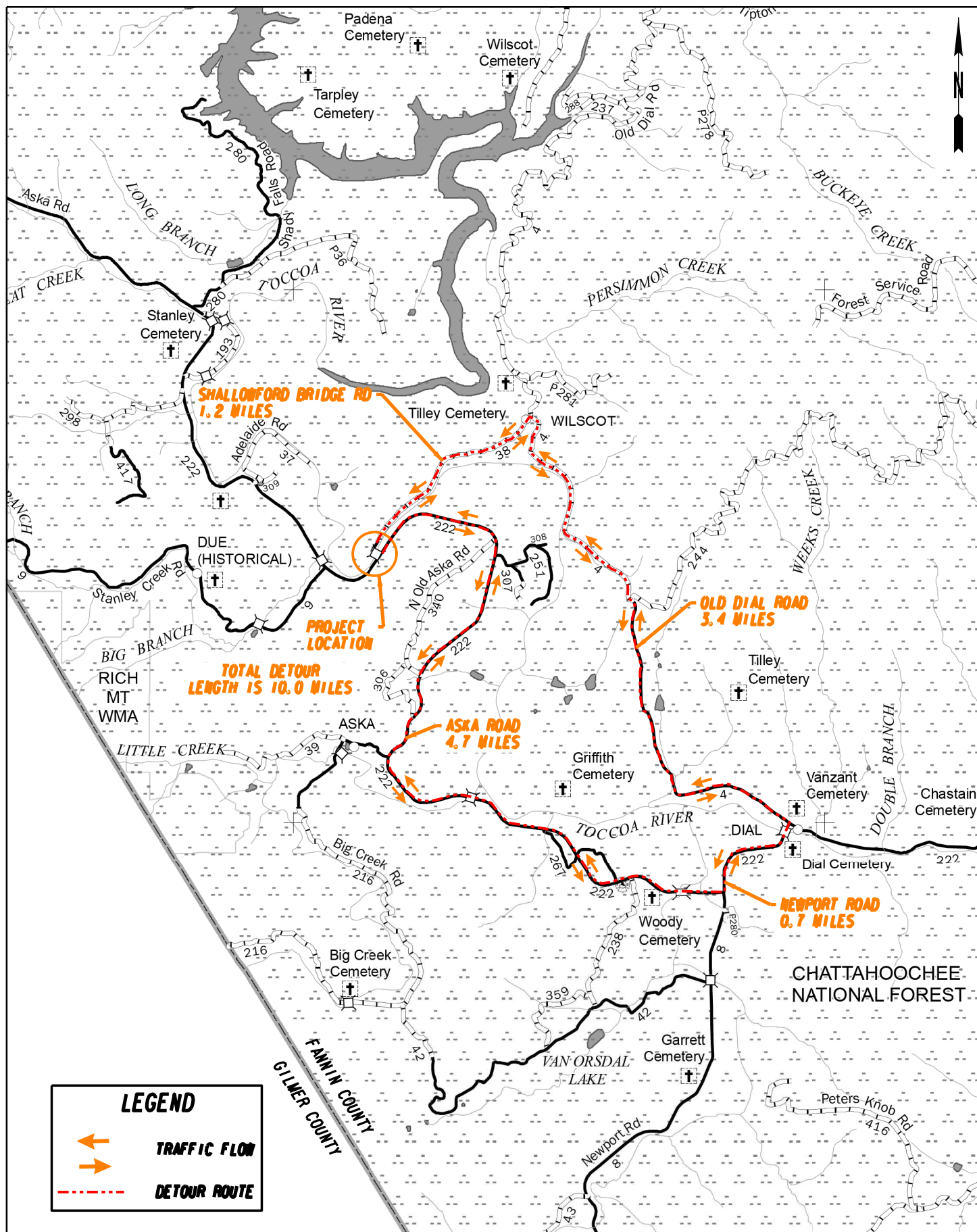
BRIDGE ID # 111-5007-0

Build = No Build	2018 (Existing Year)	2022 (Base Year)	2024 (Base Year +2)	2042 (Design Year)	2044 (Design Year + 2)
AADT	150	150	150	150	150
DHV (AM/PM)	10/15	10/15	10/15	10/15	10/15
K% (AM/PM)	4.0%/10.0%	Same as Existing Year			
D% (AM/PM)	60.0%/54.0%				
24 HR. T% - S.U.	4.0%				
24 HR. T% - COMB.	1.0%				
24 HR. T% - TOTAL	5.0%				
T% - S.U. (AM/PM)	0.0%/8.0%				
T% - COMB. (AM/PM)	0.0%/0.0%				
T% - TOTAL (AM/PM)	0.0%/8.0%				

If you have any questions concerning this information please contact Andre Washington at 404-631-1925.

Nithin Gomez
Gresham, Smith and Partners
Design Traffic Review Consultant to GDOT
678-478-3350

RPT/NMG



LONG
 ENGINEERING, INC.

NOT TO SCALE

PI 0014167, Fannin County
Georgia Department of Transportation
Bridge Replacement Project
Detour Impact Form for County Administrator

Using the attached project map, please respond to the questions below. Please provide as much information as you feel is necessary. Please respond to all questions – use “N/A” or “Non-known” if no relevant information to question is available. If you need additional information or mapping for this project, please contact us.

1. Please quantify the number of impacts anticipated by an off-site detour.

Daily Number of vehicles Unknown
Daily Number of Trucks Weight limit. restricts trucks
Number of Residences 50
Number of Businesses 3
Detour Length 10 miles

2. Please rate the impact on service if the bridge were closed for up to a year?

☐ No Concerns ☐ Moderate Concerns ☒ Major Concerns

3. If concerns were identified, please specify what they are below, be as specific as possible (Conditions of detour route, location of students, new development expected, weight restrictions, etc.)

Substance Service, Law enforcement response, 10 mile
Detour for 50 homes, impact on 3 local businesses.

4. Are there any future time periods or events that you know of where bridge closure would be of particular concern? Please note the event and any details you are familiar with.

Spring & Summer due to high traffic tourism
and Summer visitors

5. Is there anyone you feel we should contact specifically regarding this project? Please note their name, phone number, and reason we should contact them?

Chairman Stan Helton

6. Are there any additional comments you have regarding the project? Are the road names referenced the names the locals would use?

This is a historic 100 yr. old bridge. Spare it
should be vehicle restricted but left standing as a
Pedestrian Only bridge. This would be the best option.

Form Completed by (Name): R. Stanley Helton
(Title): Chairman
Date: 3.11.18

Project Meeting Minutes

Project: Concept Team Meeting
Bridge Replacement on CR-38/Shallowford Bridge Road over Toccoa River
PI No.0014167- Fannin County

Meeting Date: April 19, 2018

Attendees: SEE ATTACHED

Minutes Prepared by Long Engineering, Inc.

Jeff Henry, the GDOT PM, started the meeting by going around the room for introductions and introduced the project, then turned over the meeting to Marc Thompson of Long Engineering, Inc to go over the project. A brief description of the existing and proposed conditions of the project were discussed, then the preliminary concept report was reviewed page by page.

The following items were discussed:

General Comments:

- The Benton MacKaye Trail (BMT) crosses the existing bridge.
- Lisa with GDOT commented that the BMT will have to be officially moved to the new bridge.
- David with GDOT noted that the alternatives discussion on page 7 of the report should mention the fact that the existing bridge will remain and transfer to Fannin County.
- Discussion regarding MOU to transfer existing bridge to ownership of Fannin County.
 - It was made clear that GDOT will not provide inspections or any further service related to existing bridge once MOU is executed.
 - It was also discussed that Fannin County may incur additional costs to maintain the existing bridge and if the bridge needs to be removed in the future it will be removed at Fannin County's expense.
- Fannin County may contact Bartow County to discuss the similar Hardin Bridge Road project, which had a historic bridge on it that Bartow County wished to keep.
- Carol Kalafut, with GDOT, investigated during the CTM whether Fannin County can request GDOT inspections on the bridge after bridge responsibility is handed over to Fannin County. She found that Fannin County will need to hire a private inspector to do required inspections and may not utilize GDOT resources.
- Due to the high level of activity in the summer, Seasonal limitations should be considered for the construction phase of project.
- GDOT noted that a field office will be required for this project, and should be added to the CES estimate.
- The location maps should be revised to show the location of the proposed offset bridge.
- Revise the preferred alternative and alternative 2 descriptions to state the existing bridge will remain in place.
- Jeff Henry with GDOT comment: A TMP may be required although the project will be classified as non-significant. As a non-significant project, only a TTC would be required. Please verify and include TTC if required.
- Shallowford Bridge Road west of the existing bridge is private. Fannin County may be able to adopt a segment of this private road as needed for the project. This needs to be vetted and coordinated with GDOT ROW, the designer, and the surveyor.
- Need to coordinate construction footprint, crane location and construction time period with local businesses to mitigate impact to seasonal recreational tubing operations.

- Ensure the typical section lane and shoulder widths on the layout match the widths listed in the body of the report.
- The traffic attachment to the final submitted report will only be a one-page memo. Jeff Henry can provide example if needed.

Environmental:

- Mary Best, with Baker, commented that in recent site visit, no findings of protected plant species were noted, however a second site visit will be made as spring growth progresses.

Utilities:

- GDOT noted that utility coordination should be revised in report to be GDOT (page 7).
- TDS has a cable crossing approximately 4' north of the existing bridge.
- Blue Ridge Mountain EMC met on-site with property owner concerning existing power pole in potential conflict with construction. A relocation plan was agreed upon.
- TDS and Blue Ridge Mountain EMC agreed to coordinate relocation of their respective utilities prior to construction.
- The reimbursable utilities item will be updated with the provided utility cost information.
- There is a communication line on the north side of the existing bridge.
- There is a BRMEMC pole conflict at the east side of the proposed bridge. Chris Busbee (BRMEMC) has met with Shawn Sims and local residents and thinks they have established an easement within which to relocate the power line. Robert Tanner (TDS) wants to coordinate with BRMEMC regarding co-location of the communication line.

Bridge:

- Lisa with GDOT commented that if the existing bridge is to remain in place, it's scour impacts will have to be considered in the hydraulic model.
- David Acree, with GDOT, commented that consideration should be given to making the proposed sidewalk on the bridge wider than the 5.5' currently shown.
- Long Engineering will confirm lane widths, sidewalk width, and configurations.
- The existing bridge is part of the Benton MacKaye Hiking Trail, which combined with high pedestrian traffic due to tubing, would warrant the need for a sidewalk on the new bridge. Need to investigate sidewalk width to be used on bridge and get GDOT buy-in prior to concept report submittal. The Benton MacKaye Trail is a Hiking trail.
- Use \$45/SF unit cost for demo of existing bridge.

Right-Of-Way

- The preferred alternate shown ties to a privately held section of Shallowford Bridge Road.
- Stan Helton, Board of Commissioner, Charmin, Fannin County, indicated that they could adopt the required portion of Shallowford Bridge Road currently held as private, thus making it a county road with prescriptive right-of-way.

Please find attached the emailed responses from those who were unable to attend the Concept Team Meeting.

Action Items

-Revise and resubmit Concept Report by May 7, 2018

Concept Team Meeting
4/19/2018 PI#0014167

[illegible]

Bridge Inventory Data Listing Georgia Department of Transportation

Processed Date:4/6/2017

Parameters: Bridge Serial Number

Bridge Serial Number: 111-5007-0

County: Fannin

SUFF. RATING: 7.6

Location & Geography

Structure ID: 111-5007-0
 200 Bridge Information: 06
 *6 Feature Intersected: TOCCOA RIVER
 *7A Route Number Carried: CR00038
 *7B Facility Carried: SHALLOWFORD BR
 9 Location: 6.4 MI S OF MORGANTON
 2 GDOT District: 4841600000 - D6 District Six Cartersville
 *91 Inspection Frequency: 12 Date: 12/13/2016
 92A Fracture Critical Insp. Freq: 24 Date: 12/13/2016
 92B Underwater Insp Freq: 0 Date: 02/01/1901
 92C Other Spc. Insp Freq: 0 Date: 02/01/1901
 * 4 Place Code: 00000
 *5A Inventory Route(O/U): 1
 5B Route Type: 4 - County
 5C Service Designation: 1- Mainline
 5D Route Number: 00038
 5E Directional Suffix: 0. Not applicable
 *16 Latitude: 34 - 47.0430
 *17 Longitude: 84 - 15.5670
 98A Border Bridge: 0 98B: GA% 00
 99 ID Number: 0000000000000000
 *100 STRAHNET: 0- The Feature is not a STRAHNET route.
 12 Base Highway Network: Yes
 13A LRS Inventory Route: 1112003800
 13B Sub Inventory Route: 0
 101 Parallel Structure: N. No parallel structure exists
 *102 Direction of Traffic: 3- Alternating One Way
 *264 Road Inventory Mile Post: 0.01
 *208 Inspection Area: Area 06
 *104 Highway System: 0- Inventory Route is not on the NHS
 *26 Functional Classification: 8- Rural - Minor Collector
 *204A Federal Route Type: 0 - Not located on a Federal Aid Route

 *204B Federal Route Number: 00000
 105 Federal Lands Highway: 0. Not applicable
 *110 Truck Route: 0- The Feature is not part of the National Network for Trucks
 217 Benchmark Elevation: 0000.00

 * Location ID No: 111-00038X-000.01E

218 Datum:

*19 Bypass Length: 10
 *20 Toll: 3- On a Free Road or Non-Highway
 *21 Maintenance Responsibility: 02-County Highway Agency.
 *22 Owner: 02-County Highway Agency.
 *31 Design Load: 0- Unknown
 37 Historical Significance: 2- Eligible for the National Register of Historic Places
 205 Congressional District: 009
 27 Year Constructed: 1918
 106 Year Reconstructed: 0
 33 Bridge Median: 0-None
 34 Skew: 0
 35 Structure Flared: No
 38 Navigation Control: 0- Navigation is not controlled by an Agency
 213 Special Steel Design: 9- Truss
 267A Type Paint Super Structure: 1- Lead Chromate Oil Alkyd System. Year : 1960
 267B Type Paint Sub Structure: 0- Not Applicable Year : 0000
 *42A Type of Service On: 1-Highway
 *42B Type of Service Under: 5-Waterway
 214A Movable Bridge: 0
 214B Operator on Duty: 0
 203 Type Bridge: A- Spread footing. O. Concrete M. Steel I. Timber
 259 Pile Encasement: 3
 *43A Structure Type Main material: 3-Steel
 *43B Structure Type Main Type: 10-Truss - Thru
 45 Number of Main Spans: 1
 44 Structure Type Approach: A:3- Steel B: 2- Stringer/Multi-Beam or Girder
 46 Number of Approach Spans: 2
 226 Bridge Curve: A: Vertical: NoB: Horizontal: No
 111 Pier Protection: N - Navigation Control item coded 0, or Feature not a waterway
 107 Deck Structure Type: 8 - Timber
 108A Wearing Surface Type: 7. Timber
 108B Membrane Type: 0. None

 108C Deck Protection: 0. None
 265 Underwater Inspection Area: 0

0- Not Applicable

Signs & Attachments

225 Expansion Joint Type: 00- No expansion joint.
 242 Deck Drains: 0- None.
 243A Parapet Location: 0- None present.
 243B Parapet Height: 0.00
 243C Parapet Width: 0.00
 238A Curb Height: 0.0
 238B Curb Material: 0- None.
 239A Handrail Left: 2- Steel.
 239B Handrail Right: 2- Steel.
 *240 Median Barrier Rail: 0- None.
 241A Bridge Median Height: 0
 241B Bridge Median Width: 0
 *230A Guardrail Location Direction Rear: 0- None.
 *230B Guardrail Location Direction Fwrd: 0- None.
 *230C Guardrail Location Opposing Rear: 0- None.
 *230D Guardrail Location Opposing Fwrd: 0- None.
 244 Approach Slab: 0- None.
 224 Retaining Wall: 1- Cast-in-Place Concrete.
 233 Posted Speed Limit: 25
 236 Warning Sign: Yes
 234 Delineator: Yes
 235 Hazard Boards: No
 237A Gas: 00- Not Applicable
 237B Water: 00- Not Applicable
 237C Electric: 00- Not Applicable
 237D Telephone: 00- Not Applicable
 237E Sewer: 00- Not Applicable
 247A Lighting: Street: No
 247B Navigation: No
 247C Aerial: No
 *248 County Continuity No.: 00
 36A Bridge Railings: 3- Inspected feature exists but does not meet current or construction date standards.
 36B Transition: 0- Does not meet standards
 36C Approach Guardrail: 0- Does not meet standards
 36D Approach Guardrail Ends: 0- Does not meet standards

Bridge Inventory Data Listing Georgia Department of Transportation

Processed Date:4/6/2017

Bridge Serial Number: 111-5007-0

County: Fannin

SUFF. RATING: 7.6

Programming Data

201 Project Number: COUNTY DESIGN
 202 Plans Available: 0- No Plans Available.
 249 Proposed Project Number: 000000000000000000000000
 250A Reconstruction Approval Status: No
 250B Route Approval Status: No
 250C Approval Status Definition: 0
 250D Approval Status Federal: 0
 251Project Identification Number: 0014167
 252 Contract Date: 02/01/1901
 260 Seismic Number: 00014
 75A Type Work Proposed: 31- Replacement due to load capacity or roadway geometry
 75B Work Done by: 1- Work to be done by contract
 94 Bridge Improvement Cost:(X\$1,000) \$497
 95 Roadway Improvement Cost: (X\$1,000) \$50
 96 Total Improvement Cost: (X\$1,000) \$746
 76 Improvement Length: 1495.0'
 97 Year Improvement Cost Based On: 2013
 114 Future AADT: 735
 115 Future AADT Year: 2032

Measurements:

*29 AADT: 490
 *30 AADT Year: 2012
 109 % Truck Traffic: 1
 * 28A Lanes On: 1
 *28B Lanes Under: 0
 210A Tracks On: 00
 210B Tracks Under: 0
 * 48 Maximum Span Length: 135
 * 49 Structure Length: 175
 51 Bridge Roadway Width: 11.4'
 52 Deck Width: 11.4'
 * 47 Total Horizontal Clearance: 11.4'
 50A Curb / Sidewalk Width Left: 0.0
 50B Curb / Sidewalk Width Right: 0.0
 32 Approach Rdwy. Width: 16.0'
***229 Approach Roadway**
Rear Shoulder Left: Width: 0 *Right Width:*0.0 *Type:* 7 - None.
Fwd Shoulder: Left Width: 0 *Right Width:*0.0 *Type:* 7 - None.
Rear Pavement: Width: 16.0 *Type:*7- None (Dirt).
Forward Pavement: Width: 16.0 *Type:*7- None (Dirt).
Intersection Rear: 1 *Forward:*0

Ratings and Posting

65 Inventory Rating Method: 2-Allowable Stress (AS)
 63 Operating Rating Method: 2-Allowable Stress (AS)
 66A Inventory Type: 2 - HS loading.
 66B Inventory Rating: 10
 64A Operating Type: 2 - HS loading.
 64B Operating Rating: 15
231Calculated Loads **Posting Required**
 231A *H-Modified:* 07 Yes
 231B *Type3/Tandem:* 00 No
 231C *Timber:* 00 No
 231D *HS-Modified:* 00 No
 231E *Type 3S2:* 00 No
 231F *Piggyback:* 00 No
 261 H Inventory Rating: 06
 262 H Operating Rating: 08
 67 Structural Evaluation: 2
 58 Deck Condition: 8 - Very Good Condition
 59 Superstructure Condition: 3 - Serious Condition
 * 227 Collision Damage:
 60A Substructure Condition: 5 - Fair Condition
 60B Scour Condition: 8 - Very Good Condition
 60C Underwater Condition: N - Not Applicable
 71 Waterway Adequacy: 9-Superior to present desirable criteria.
 61 Channel Protection Cond.: 8-Equal to present desirable criteria.
 68 Deck Geometry: 2
 69 UnderClr. Horz/Vert: N
 72 Approach Alignment: 4-Between 6 and 3
 62 Culvert: N - Not Applicable
 70 Bridge Posting Required: 0. > 39.9% below
 41 Struct Open, Posted, CL: P. Posted for load
 * 103 Temporary Structure: No
232 Posted Loads
 232A *H-Modified:* 07
 232B *Type3/Tandem:* 00
 232C *Timber:* 00
 232D *HS-Modified:* 00
 232E *Type 3s2:* 00
 232F *Piggyback:* 00
 253 Notification Date: 02/01/1901
 258 Federal Notify Date: 02/01/1901

Hydraulic Data

113 Scour Critical: U. No Load Rating; no scour critical data entered.
 216A Water Depth: 03.4
 216B Bridge Height: 16.6
 222 Slope Protection: 0
 221A Spur Dike Rear:
 221B Spur Dike Fwd:
 219 Fender System: 0- None.
 220 Dolphin:
 223A Culvert Cover: 000
 223B Culvert Type: 0- Not Applicable
 223C Number of Barrels: 0
 223D Barrel Width: 0.0
 223E Barrel Height: 0.0
 223F Culvert Length: 0.0
 223G Culvert Apron: 0
 39 Navigation Vertical Clearance: 0'
 40 Navigation Horizontal Clearance: 0
 116 Navigation Vertical Clear Closed: 0

53 Minimum Vertical Clearance Over Rd: 10' 5"
 54A Under Reference Feature: N- Feature not a highway or railroad.
 54B Minimum Clearance Under: 0' 0"
***228 Minimum Vertical Clearance**
 228A *Actual Odometer Direction:* 10'05"
 228B *Actual Opposing Direction:* 99'99"
 228C *Posted Odometer Direction:* 09'00"
 228D *Posted Opposing Direction:* 00'00"
 55A Lateral Underclearance Reference: N- Feature not a highway or railroad.
 55B Lateral Underclearance on Right: 0.0
 56 Lateral Underclearance on Left: 0.0
 10A Direction of Travel for Max Min: 3
 10B Max Min Vertical Clearance: 10'5"
 245A Deck Thickness Main: 3.0
 245B Deck Thickness Approach: 3.0
 246 Overlay Thickness: 0